

REMARKS

Claims 1, 4-5, and 8-20 are pending in the application. Claims 19-20 have been withdrawn from consideration as being drawn to a non-elected invention. Claims 1-18 have been examined on the merits. Claims 1, 4, 5, 8, 11, 13, 16, and 18 have been amended to further clarify the presently claimed invention. The amendment to claim 1 merely incorporates the limitations of now canceled claims 2 and 3. Support for the amendment to claim 8 can be found at page 12 in the specification. Other amendments to the claims are made to provide correct antecedence for certain claim language and to write out full words in place of abbreviations. No new matter has been inserted into the application.

Rejection Under 35 USC § 112, Second Paragraph

Claims 1-18 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

Regarding (a), claims 1, 5, 8, and 13, the objected to word “distinct” has been deleted and the abbreviation LC-sense has been replaced with “large circular-antisense”. Therefore, this rejection has been overcome.

Regarding (b), claims 1 and 5, the abbreviation LC-sense has been replaced with “large circular-antisense”. Therefore, this rejection has been overcome.

Regarding (c), claims 2 and 4, claim 2 has been canceled; in claim 4, the abbreviation LC-sense has been replaced with “large circular-antisense”. Therefore, this rejection has been overcome.

Regarding (d), claims 11 and 16, the abbreviation LC-sense has been replaced with “large circular-antisense”. Therefore, this rejection has been overcome.

Regarding (e), claims 3, 6 and 7, claim 3 has been incorporated into claim 1, and claims 6 and 7 have been canceled. Therefore, this rejection has been overcome.

Regarding (f), claim 8, “stably associated” has been replaced with “bound to”, support for which can be found throughout the specification, including page 12 in the specification. Therefore, this rejection has been overcome.

Regarding (g), claim 16, the Examiner objected to the language “different label”. Claim 16 has been amended to distinguish from the label mentioned in part (i). Therefore, this rejection has been overcome.

Regarding (h), claim 16, the abbreviation LC-sense has been replaced with “large circular-antisense”. Therefore, this rejection has been overcome.

Regarding (i), claim 18, the objected to language “such as” has been deleted. Therefore, this rejection has been overcome.

Rejection Under 35 USC § 112, First Paragraph

Claims 6 and 7 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

Claims 6 and 7 have been canceled. Therefore, this rejection has been overcome.

Rejection Under 35 USC § 112, First Paragraph

Claims 1-18 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicants traverse this rejection. Reconsideration and withdrawal thereof are respectfully requested.

The Examiner states that because the nucleic acid sequences are not provided in the specification, the specification fails to provide the written description for the claimed invention.

Applicants strongly disagree with the Examiner. A significant aspect of the claimed invention is directed to not simply a library or array of limited known nucleic acids, but rather the concept that a single stranded circular molecules in which the probe aspect is sense stranded, loaded onto a solid support, can be used for providing efficient binding to target sequences, which is even more efficient than currently known microarray methods that use anti-sense sequence probes. This principle is an emphasis of the claimed invention. Therefore, to be forced to limit the claims to a particular sequence would be to miss the point of the invention. Applicants had possession of the claimed invention in that Applicants have demonstrated the general principle of using sense stranded array for effective binding to target genes.

Example 8.1 at page 23 indicates that 1,152 non-redundant clones were used to produce the large circular-sense molecules, and these were bound to substrate surface to undergo target binding. The result was that 29 of these genes were up regulated in liver cancer tissue, and 6 genes were down regulated in liver cancer tissue (Example 8.4, page 24). Based on this type of data, Applicants have provided full written disclosure of the concept of using large circular-sense molecules for target detection. Accordingly, Applicants respectfully request withdrawal of the rejection.

Rejection Under 35 USC§ 102(b) Over Swaroop (Nucleic Acids Res. 19(8), 1954 (1991))

Claims 1, 2, and 4 have been rejected under 102(b) as being anticipated by Swaroop. Applicant traverses this rejection. Reconsideration and withdrawal thereof are respectfully requested.

Swaroop discloses cDNA subtraction library. However, Swaroop fails to disclose library generated from a phagemid, as in the presently claimed invention. Accordingly, Swaroop fails to anticipate the presently claimed invention.

Conclusion


It is believed that the application is now in condition for allowance. Applicants request the Examiner to issue a notice of Allowance in due course. The Examiner is encouraged to contact the undersigned to further the prosecution of the present invention.

The Commissioner is authorized to charge JHK Law's Deposit Account No. **502486** for any fees required under 37 CFR § 1.16 and 1.17 and to credit any overpayment to said Deposit Account No. **502486**.

Respectfully submitted,

JHK Law

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